

MUSC and Economic Development

Ray Greenberg
Presented to SC Commission on Higher
Education
August 10, 2011

MUSC:
Largest non-Federal
Employer in Region

> 12,000 Employees

MUSC:
\$2 Billion per year
Operating Budget

Estimated economic impact
approaching
\$3.5 Billion per year

State Appropriation:

- \$54 Million per year
- 6% of University Budget
- < 3% of Total Budget

Conclusions

1. The fiscal health of MUSC is critical to the economic health of the region.
2. The future fiscal health of MUSC depends on an increasingly diverse stream of revenues.

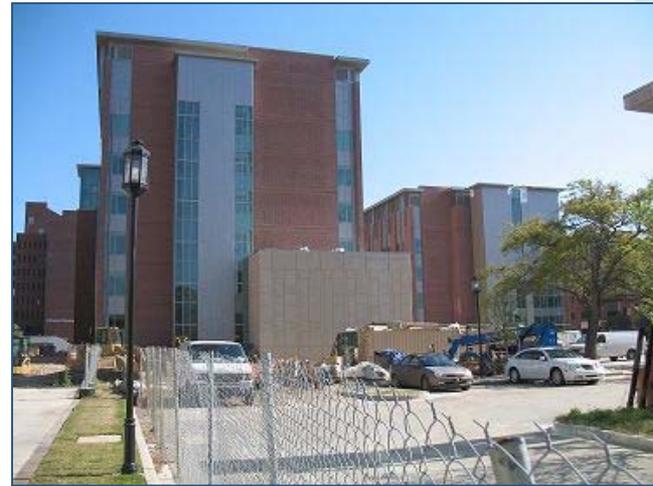
Strategic Plan

- Innovation Technology
- Entrepreneurism
- Globalization
- Interprofessional Work



Drug Discovery Building

- 112,000 sq. ft.
- \$62MM cost
- Expected occupancy:
September 2011



Bioengineering Building

- 100,000 sq. ft.
- HQ for SC Bioengineering Alliance
- Regenerative Medicine: Tissue engineering, Genomics
- \$58MM cost
- Expected occupancy: September 2011



Drug Discovery Endowed Chairs



Dr. Charles D. Smith



Dr. John Lemasters



Dr. Pat Woster



Dr. Ken Tew

Changing What's Possible.

Bioengineering Endowed Chairs



Dr. Richard Swaja



Dr. Martin Morad



Dr. Xuejun Wen



Dr. Joseph Helpern

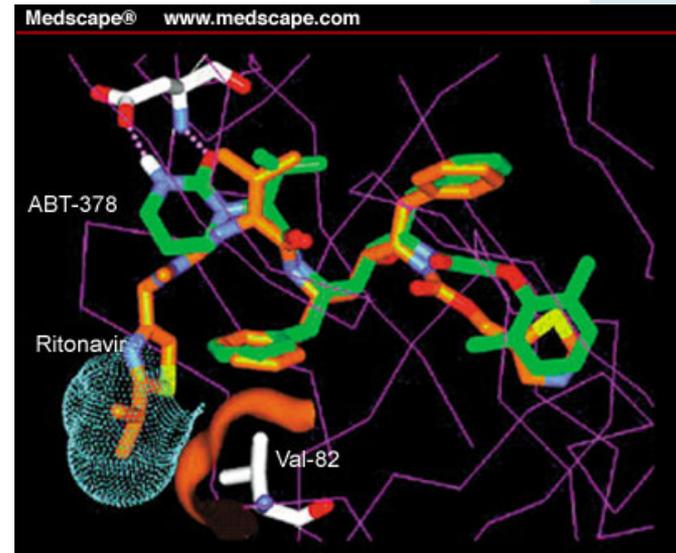
Changing What's Possible.

High Throughput Drug Screening



Changing What's Possible.

Nuclear Magnetic Resonance Imager for Structural Biology

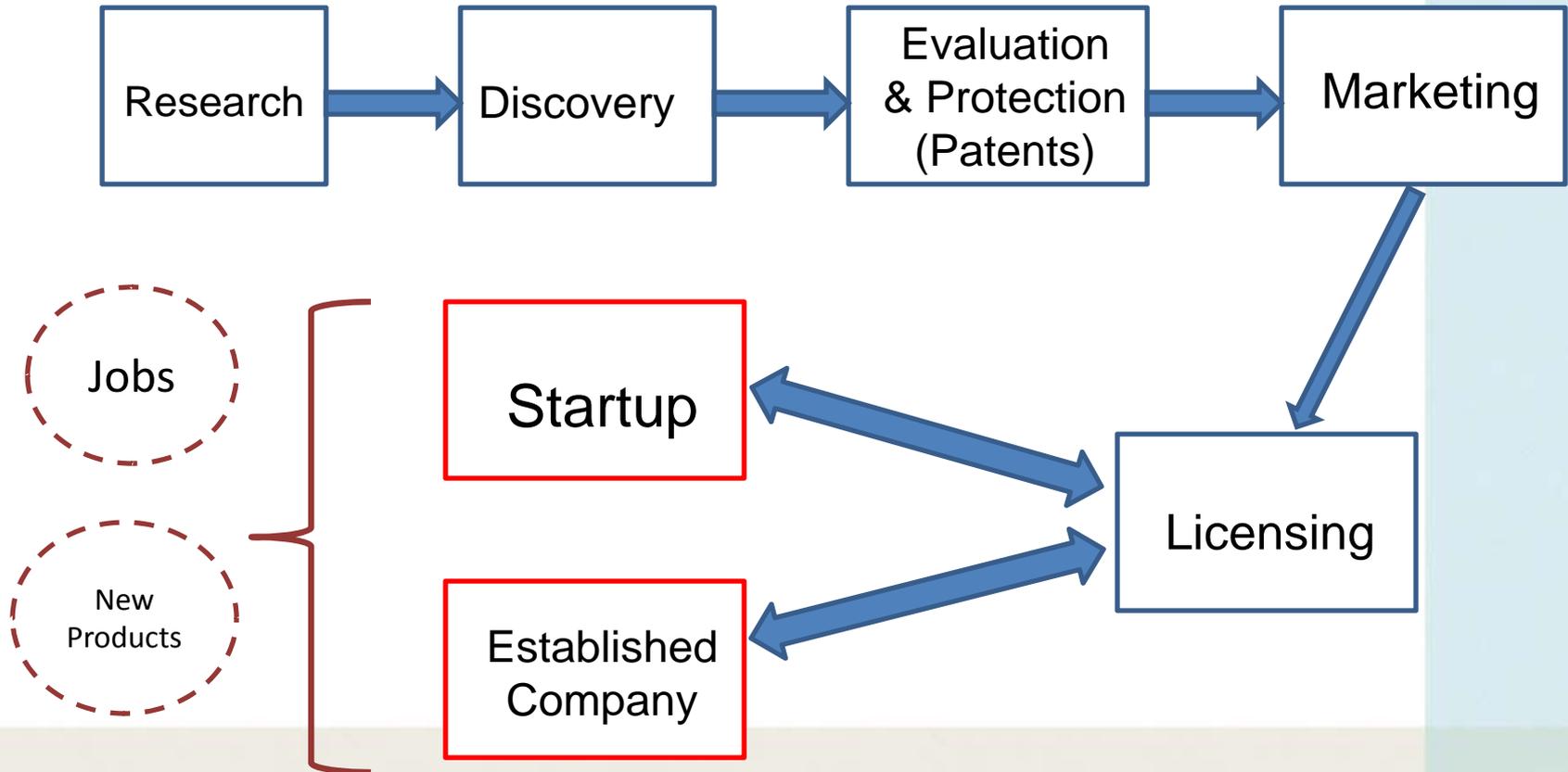


Changing What's Possible.

MUSC Research Engine

- \$234M in awards in FY10
- Federal funding 65% of total
 - Top 100 Universities in the nation for federal R&D spending
 - Six departments in top 25
- NIH funding national rankings
 - Neurosciences: #2
 - Psychiatry: #8

Tech Transfer Mechanics

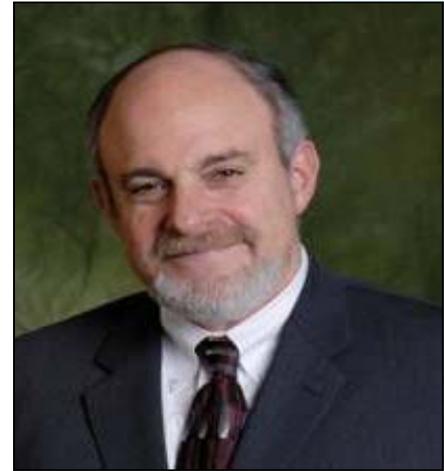


MUSC Tech Transfer Statistics

Fiscal Year	2011 (as of 5/18)
Invention disclosures	34
New Patent Apps	9
US Patents Issued	6
Licenses & Options	11
New Startups	5

Recruited Dr. Larry Olanoff

- MUSC Special Advisor to the President for Corporate Relations
- Focus on building robust strategic relationships between private sector and MUSC
- Retired as President and COO of Forest Labs, a pharma company with \$4.2B annual revenue and 5000 employees
- M.D., Ph.D. with extensive experience in development of new drugs



MUSC Success Stories

Micrus

- Startup (1996) based on MUSC technology
- Approved device (stent) to treat cerebral vascular disease
- IPO (2005) for \$57M
- Acquired in 2010 by JnJ for \$468M

MUSC Success Stories

Taligen Therapeutics

- Startup (2004) from MUSC & U. of Colorado
 - Located in Boston
- Acquired in 2011 by Alexion Pharma for \$111M cash and future payments based on product performance

MUSC Related Startups in Charleston

- FirstString Research
- Immunologix
- SemiAllogen
- Vortex
- Charleston Pharma
- MicroVide
- SimTunes
- Oak Therapeutics
- Schnellgen
- Mitochem
- Sphingogene
- Patient Safety Strategies
- Charleston Medical Therapeutics

Conclusions

1. MUSC is focused on tech transfer.
2. MUSC can be an engine for biomedical commercial growth in Charleston.